

Title (en)  
ORGANIC BASED VARNISH OR GELCOAT, METHODS FOR ITS MANUFACTURE AND USE, AND SUBSTRATE COMPRISING SUCH VARNISH OR GELCOAT

Title (de)  
ORGANISCHER LACK ODER ORGANISCHE GELBESCHICHTUNG, VERFAHREN ZUR HERSTELLUNG ODER VERWENDUNG SOWIE DIE GELBESCHICHTUNG ODER DEN LACK ENTHALTENDES SUBSTRAT

Title (fr)  
VERNIS OU REVETEMENT DE GEL A BASE ORGANIQUE, SES PROCEDES DE FABRICATION ET SON UTILISATION, ET SUBSTRAT COMPORTANT UN TEL VERNIS OU COUCHE DE GEL

Publication  
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Application  
**EP 01970355 A 20010705**

Priority  
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Abstract (en)  
[origin: WO0208343A2] Organic based and preferably clear and glossy lacquer/varnish or an organically based gel-coat with the ability to form coatings with high wear resistance, as well as method for manufacturing same, said lacquer/varnish or gel-coat comprises a controlled amount of inorganic polymer particles mainly with a size of 1-100 nm, the particles being able to form a three-dimensional network that is independent of the organic network of the lacquer or which may have bondings to this network. The polymer particles are typically a reaction product obtained by hydrolysis and condensation reactions of monomer compounds chosen among the following groups: i)  $M(OR)_n$ , or ii)  $R'-M(OR)_n$ , where M is a metal ion, and R is an organic group chosen among alkyl, alkenyl, aryl or combinations of such groups with from 1 to 8 carbon atoms,  $R' = R$  or  $R-X$ , where X is an organic group like e.g. amine, carboxyl or isocyanate, and n is an integer between 1 and 6. Alternatively the polymer particles are natural or synthetic clay based powders or combinations of such powders. The lacquer/varnish or gel-coat is used as protective coatings on e.g. surfaces of aluminium or steel, preferably rolled aluminium or steel.

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IPC 8 full level  
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